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Sorting the ibex from the goats in Portugal

Robert G. Bednarik

An article by António Martinho Baptista (2000) in the light-weight rock art magazine *Adoranten*[1] raises a number of fascinating issues about taxonomy. The archaeological explanations so far offered for a series of rock art sites in the Douro basin of northern Portugal and adjacent parts of Spain contrast with the scientific evidence secured to date from these sites. This includes especially archaeozoological, geomorphological, sedimentary, palaeontological, dating and especially analytical data from the art itself. For instance one of the key arguments in favour of a Pleistocene age of fauna depicted along the Côa is the claim that ibex became extinct in the region with the end of the Pleistocene. This is obviously false. Not only do ibex still occur in the mountains of the Douro basin—even if their numbers have been decimated—they existed there throughout the Holocene. More relevantly, the German achaeozoologist T. W. Wyrwoll (2000) has pointed out that all the ibex-like figures in the Côa valley resemble *Capra ibex lusitanica* or *victoriae*. The Portuguese ibex, *C. i. lusitanica*, became extinct only in 1892, and not as Zilhão (1995) implies at the end of the Pleistocene. The Gredos ibex (*C. i. victoriae*) still survives in the region. The body markings depicted on one of the Côa zoomorphs, a figure from Rego da Vide, resemble those found on *C. i. victoriae* so closely that this typical Holocene sub-species rather than a Pleistocene sub-species (notably *Capra ibex pyrenaica*) is almost certainly depicted (Figure 1). Wyrwoll concludes:

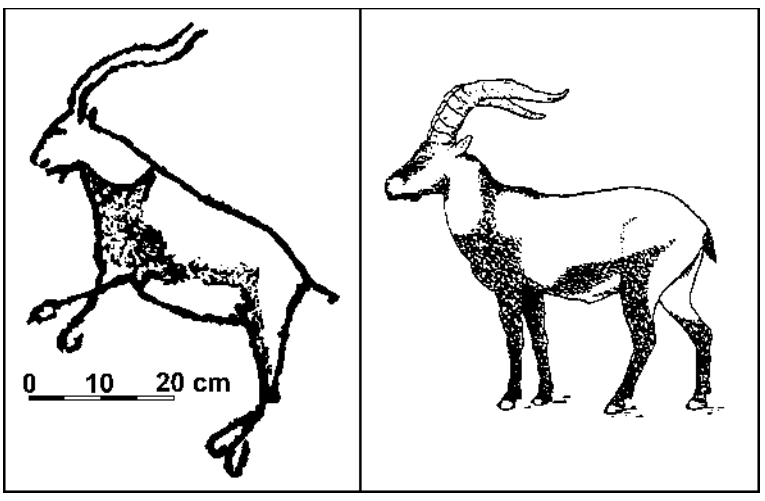

Figure 1. *Petroglyph depicting a late Holocene ibex (Capra ibex victoriae), as indicated by the horns and body markings, from panel 1 at Rego da Vale, Côa valley. (Left after Zilhão et al. 1997.)*

> The idea that some of the Côa rock engravings would date to the Palaeolithic, as expressed by some Portuguese archaeologists because of the mere existence of ibex representations amongst them, is based on incorrect assumptions regarding the distributional history of this species. There is also no other zoological reason to date any piece of Côa rock art into the Palaeolithic (Wyrwoll 2000: 95, my translation).

Among the zoomorphs found in the Côa valley, there is not a single depiction of a Pleistocene species. Nor is there a typical Pleistocene specimen among the thousands more animal depictions at Siega Verde and the other Spanish, French and Portuguese open air sites some attribute to the Palaeolithic, such as Murciélagos, Domingo García, Carbonero Mayor, Bernardos, Ortigosa, Fornols-Haut, Piedras Blancas, Mazouco, and the Guadiana sites. This complete absence of even a single representative of the typical Late Pleistocene fauna of the Iberian Peninsula presents the advocates of a Pleistocene age with a conundrum. The overwhelming majority of the zoomorphs at all these sites present bovid and equine motifs. The bovids resemble Spanish fighting bulls, with their distinctively curved, forward-pointing horns. The horse-like figures are often badly drawn, not at all in Palaeolithic style, and they even occur in huge number on a recently built 2-km-long stone wall near Siega Verde (Hansen 1997). Bearing in mind that the Siega Verde art cannot possibly predate the huge former river terrace at that site, which we know to be post-Roman, there is no hope of finding any Palaeolithic art examples at that site.

Another scientific discipline, geology, arrives at the same conclusion, and Baptista's (2000) oversight in citing the findings of Portuguese geologists is relevant. All the open air sites of so-called Palaeolithic rock art occur on the same types of rock, schists or slates, lightly metamorphosed facies that under atmospheric hydration revert to their former state, mudstone, and then disintegrate readily. Schists and slates retreat at roughly half the rate of limestone, and we know that unprotected petroglyphs on limestone survive almost never beyond 2000 years. At Siega Verde, a surface retreat of 30 mm per 100 years was measured on a historical surface, immediately next to petroglyphs. Schist and slate are very soft rocks, readily subjected to fluvial wear, and both the Côa and Agueda valleys experience rapid abrasion and down-cutting from the coarse quartz sands and angular quartz cobbles. The Siega Verde petroglyphs all occur in the present flood zone of the river, and along the Côa much of the rock art is also still flooded annually. In these environments of periodic high kinetic energy, sharp abrasive action in narrow valleys combined with very soft rocks it is impossible for petroglyphs to survive for any great length of time. In the case of the Siega Verde petroglyphs, Danish rock art researcher Bjarne Stig Hansen reports that

> [t]he words of villagers from [nearby] Castillejo de Martin Viejo still rang in my ears: they had always believed the art to have been made by shepherds whiling away the time and they had had a good laugh when archaeologists told them that the art was Palaeolithic (Hansen 1997: 52-3).

The lower valleys of the Agueda and Côa are both entirely free of any Pleistocene sediment; all sediments are of the Holocene, in fact of the late Holocene. Therefore it is impossible to find Pleistocene occupation deposits in the lower part of the valleys, where the rock art occurs. Such older deposits may only be found higher up on the slopes, where they may have been preserved due to their elevation. Up there, however, rock art is lacking, so a connection between the art and any occupation deposits cannot be made. Moreover, there is a danger that older deposits from the slopes have been transported down and redeposited as a colluvial. If they contain stone tools and occur at rock art panels, they could mistakenly be related to the petroglyphs.

Despite these initial considerations, Baptista has no hesitation describing the Côa rock art as being largely of the Palaeolithic. For instance he depicts panel 3 of Penascosa as a Palaeolithic panel. But these zoomorphs were clearly incised with a metal tool. Michael Eastham, a British rock art scholar specialising in Palaeolithic art and himself an artist of considerable experience, looked at the panel and immediately exclaimed: "But these so-called Palaeolithic figures were cut with a tool of carbon steel!" Baptista depicts panel 2 of Ribeira de Piscos, with its phallic human figure. I have spent hours scanning the 2000 or so finely engraved lines on this panel and could not find a single line made with a stone tool. All markings on that panel, and especially the anthropomorph, were incised with metal. Baptista offers a poor rendering of panel 1 at Vermelhosa, showing two motifs, a rider with a superimposed zoomorph, which Baptista defines as a "Palaeolithic caprine" placed over an "Iron Age warrior". This raises obvious questions: how does he know the meaning and age of either motif? The superimposed quadruped may have two straight horns, and whatever it may be intended to depict, I would never claim to know that. I do know, having inspected the superimposition sequence, that the zoomorph is the younger of the motifs, which prompts me to ask: how can a Palaeolithic motif be younger than an Iron Age one? Actually both motifs have the same degree of weathering and repatination. A group of other recorders of this site, whose recording of the same motifs is of much better quality, also first reported Palaeolithic rock art from Vermelhosa (Abreu et al. 1998). But they then reviewed their findings and came to the conclusion that the rock art at this site is of the Iron Age (Abreu et al. 2000), having the courage to correct themselves. Baptista himself has oscillated between these two attributions at another, nearby site. Two years after the Mazouco equine quadruped was pronounced to be Palaeolithic, he rejected that attribution squarely, having studied the Vale da Casa site near Vermelhosa, and deciding that it was

[1] It is requisite to ask what the name of this magazine refers to. It alludes to the very common rock art motifs that are thought to resemble stylised humans with raised arms. The implication is that these figures represent adorants, or praying humans. In Europe they appear to be of the Neolithic and Bronze Age, but they are also found in other continents, e.g. South America. This naming is pure fantasy, it has no factual basis whatsoever. We have no idea in what attitude people of the Neolithic prayed, or even that they did pray. Most ethnographic observation does not relate supplication ritual to Eurocentric concepts of prayer or to body attitudes with raised arms. Even the proposition that people should have depicted so many adorants on rock surfaces seems itself suspect. Seen in this context, the name of this magazine, *Adoranten*, seems symptomatic of European inability to appreciate that the iconic content of alien arts must not be interpreted in accordance with the iconographic or behavioural conventions of the alien interpreter.

Iron Age (Baptista 1983: 63).

Baptista also presents the recently excavated rock art at Fariseu, which had been under the water of the Pocinho dam for many years. The panel had become covered by strata of lake sediment, no more than 17 years old, containing a colluvium of material that had been washed or had fallen down the slope above the site, as clearly stated in the initial report (Anonymous 2000). It was claimed that this colluvium contained some stone tools, but bearing in mind the distinctly secondary nature of such sediments, they are of no consequence in dating the rock art. (A colluvium is a loose deposit of rock debris formed at the base of a cliff or slope.) Baptista illustrates the right side Fariseu panel, which is unfortunate, as the left panel (Figure 2) comprises the beautiful horse figure with a distinct bridle across its muzzle (Abreu and Bednarik 2000). Since we have no evidence of domesticated horses in the Pleistocene, this cannot be a Pleistocene panel.

Figure 2. *A section of the petroglyph panel at Fariseu, Côa valley, showing a horse-like figure with a bridle, which Baptista claims to be of Palaeolithic age. The body of the figure is misshapen (see e.g. rump), lines are corrected (see e.g. upper neck), and there is a second, misshapen head attached — all features usually absent in authentic Palaeolithic rock art.*

Dating samples were removed from this site three years ago but their results have never been made public. Much the same applies to nearly all other dating samples, be they for radiocarbon assay or for thermoluminescence analysis. The only carbon date ever published from the Côa valley (other than the direct dates from the petroglyphs) was a 1000-year-old date from the Penascosa terrace, which we had earlier been told was a Pleistocene terrace, and some irrelevant TL results that did not relate to any rock art or rock art sites. Recently Aubry et al. (2002) presented a table purporting to summarise TL dates from several sites but it was truncated at 10 000 BP so as not to show that the majority of TL dates were Holocene. Bearing in mind the immense amount of archaeological work invested in the Côa valley since 1995, this is very meagre indeed. We have no reports of faunal remains, let alone human remains from any of the hundreds of trenches excavated, and the occupation sites are controversial. Sites claimed to have Pleistocene rock art, such as Quinta da Barca, contained ceramic remains right down to bedrock (Figure 3), and as the geologists had predicted, no genuine Pleistocene sediments were ever found at any of the Côa rock art sites.

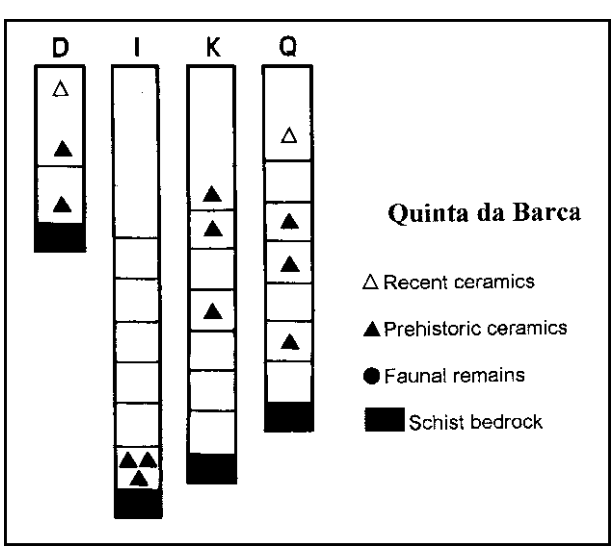

Figure 3. *Sections excavated at Quinta da Barca, showing the occurrence of ceramics down to bedrock, yet Baptista claims a Palaeolithic age for the site. (After Zilhão et al. 1997.)*

Baptista presents a detailed discussion of the complex cultural sequence of the Côa rock art he has constructed. There are images he places in the Gravettian, the Solutrean, the Magdalenian. But we have no aurochs or horse remains from northern Portugal from these periods. Bearing in mind that during the glacial peak, the area had periglacial conditions, it is very doubtful that the species Baptista believes to recognise in the art then actually existed in the region. The simple fact, however, is that far more than half of Côa's 1000 or so petroglyphs consist of historical motifs, such as inscriptions, dates, crucifixion motifs, or pictures of clocks, bridges, trees, locomotives and the like. In many cases, these sub-recent images are more deeply weathered or repatinated and clearly older than the adjacent animal figures Baptista describes as being of the Pleistocene. For instance a couple of metres from the composition Baptista presents (2000: 19), two dates from the 18th century are almost indecipherable, while the nearby animal outlines, incised with metal tools, are in mint condition.

What, then, is the basis of Baptista's stylistic sequence of the Côa rock art? He seems to refer to presumably dated Palaeolithic images in caves and their perceived style. Years ago he wrote himself, concerning the attribution of the Mazouco equid figure, that it is a completely

> wrong procedure to attribute chronologies only on the basis of stylistic concepts … we are still very far from a systematisation of the pre-historic art (Baptista 1983: 63).

But now he is doing precisely that, he is constructing a sequence based on a few hundred figures, which he stylistically spreads over some 26 000 years. Bearing in mind that the traditional stylistic chronology of genuine Franco-Cantabrian cave art of the Upper Palaeolithic has been in tatters since the dating of some of the art in Chauvet Cave (Clottes et al. 1995; Bednarik 1995a), which are the palimsests he bases his chronology of Côa rock art on? He mentions all too briefly Parpalló, and the one anthropomorph he compares to one from La Marche even though it was made with a metal tool. Zilhão (1995) has used the same approach, with predictable consequences. He pointed out the stylistic similarity between the heads of one bovid from Côa and one from Lascaux. That was a bad choice, because the large Lascaux bovids are probably of the Holocene (Bahn 1994, 1995). Through his comparison Zilhão might thus only be able to demonstrate that the Côa figure must also be of the Holocene. This example illustrates the futile and self-contradictory stylistic approach. It would be more appropriate to ask, why are more than half the Côa motifs made by percussion, a method not used in real Palaeolithic art production? All the cave petroglyphs of the European Pleistocene were made by abrasive action, they are true engravings. Most of the open-air petroglyphs claimed to be of the Palaeolithic were made by impact rather than abrasion. One might argue, perhaps a different technique was used in caves because it is more convenient to engrave on limestone, but this argument does not stand up to scrutiny either. The cave art of Australia is made largely by percussion techniques. So it needs to be explained why Palaeolithic artists would use one method exclusively in caves and on plaques, and a totally different technique on open-air panels. Finally, the most common motifs in genuine Palaeolithic rock art are not zoomorphs, but the so-called "signs", of which we have three or four times as many overall. They are particularly well developed and complex in the Palaeolithic cave sites of the Iberian Peninsula (Pilar and Lopez 1977). But there is not a single Palaeolithic "sign" at any of the Iberian open-air sites claimed to be of the Pleistocene. That factor alone questions the Palaeolithic attribution severely. Semi-naturalistic animal figures of horses, bulls and goats were, after all, made in many periods, including Roman times, and there are many Roman remains in the Côa valley. Indeed,

we have even pictures of Roman aurochs, and they resemble Palaeolithic pictures of these bovids very closely. The valley has been used extensively for milling since Roman times, and it is most transparent that all rock art sites coincide with or cluster around the remains of historical mill buildings. This applies in both the Côa valley and at the Siega Verde site, and is hardly a coincidence. And we know that the millers used pointed steel rods to roughen their millstones, that the marks of these tools resemble those on the rock panels, that the millers had hours to while away each time they waited for the mills to do their work. Most of the Côa rock art is of recent centuries and of similar age as the many dates and inscriptions, this is self-evident (Figure 4). Some no doubt dates back as far as Roman times, and the oldest figures, which are certainly not of any Palaeolithic style, may even be of pre-Roman times. It is a fascinating corpus of rock art, and far more interesting than Palaeolithic rock art. Which it is evidently not.

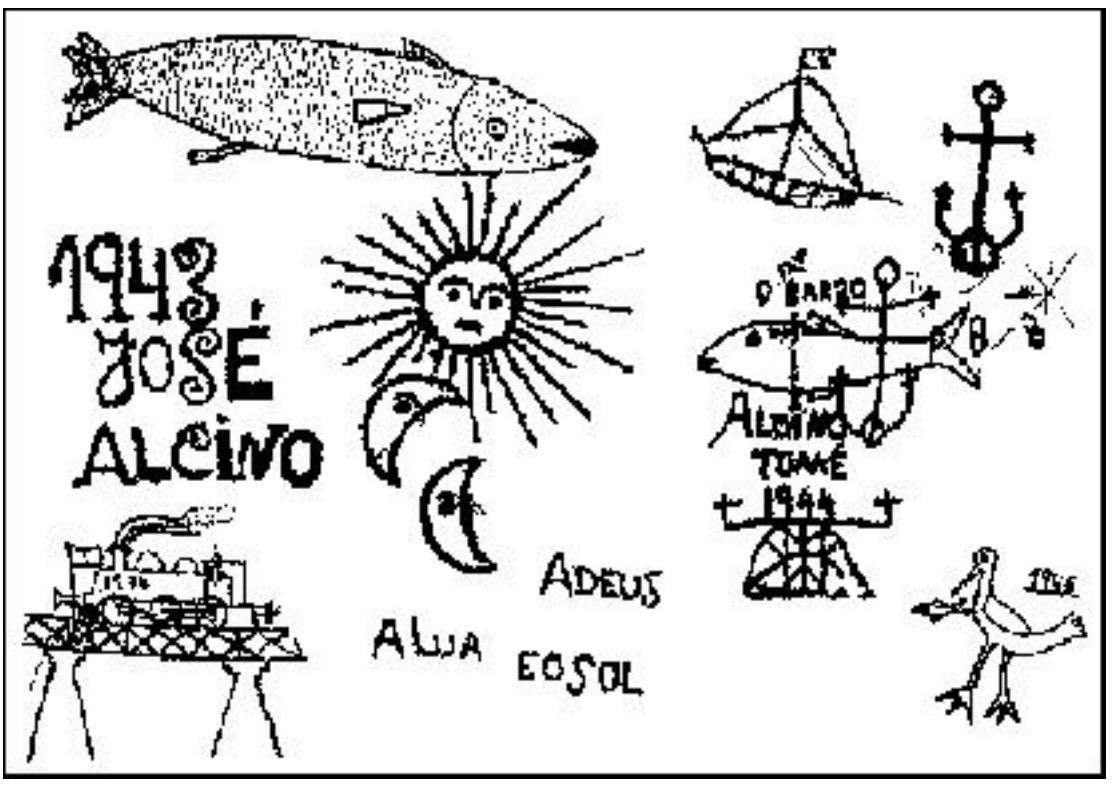

Figure 4. *A selection of quite typical petroglyphs from the Côa valley. All discussions of this corpus pass over the fact in silence that most Côa rock art does not remotely resemble Palaeolithic art, but consists of motifs such as these, and dates beginning with about A.D. 1720. These kinds of motifs are frequently older than the naturalistic zoomorphs Baptista describes as Palaeolithic, as shown by weathering, superimposition and repatination.*

One cannot prove conclusively that there is no Palaeolithic rock art in the Côa valley, but all the scientific evidence for direct dating has so far resulted in late Holocene datings, as in the case of the sediments (Bednarik 1995b; Watchman 1995, 1996). The probability that someone will one day demonstrate a Pleistocene age at one of these sites will always remain, but it is an extremely slim probability. So far we have only experienced stale stylistic argument based on wishful thinking, and a great silence about archaeological dating results from rock art sites. Until Baptista and Zilhão present their stylistic arguments in a precise format enabling their opponents to test each claim on its own merits, no realistic basis for debate exists. Until they present all dating results, particularly those that differed very much from their hopes and wishes, there is no archaeology of the Côa valley one can productively discuss. Until they explain to the discipline why they are not prepared to help saving the much greater rock art on the Guadiana in southern Portugal, their shrill claims about the Côa valley will continue to sound hollow. After all, there is several times as much rock art on the Guadiana than on the Côa. The Guadiana corpus with its 600 sites, to be inundated by a huge dam, constitutes one of the three largest single concentrations of rock art in all of Europe, being of the magnitude of Val Camonica and Mount Bego. Zilhão has sharply opposed the endeavours of international organisations to save the Guadiana rock art, and has severely damaged the prospects of their campaign. He has angrily rejected the right of the UISPP to become involved in the campaign (Zilhão 2001), and he has repeatedly attacked the IFRAO over its petition and other actions to save the huge Guadiana rock art corpus.

From separating the sheep from the goats (or whatever might be depicted in the rock art, for I have no particular preferences) we have suddenly come to separating those who save or protect rock art from those who preside over its destruction. Baptista has a long career in the latter, considering his involvement in the destruction of the rock art in the Pocinho reservoir during the early 1980s, which he recorded instead of saving it. The age of the rock art of Portugal is not remotely as important, I would argue, as is its preservation. How does Baptista reconcile his and Zilhão's opposition to the campaign to save the massive Guadiana rock art complex with his responsibility as Director of the National Centre of Rock Art? Does he think it is the role of his taxpayer-funded position to facilitate the wholesale destruction of Portuguese rock art, or is it only the Guadiana rock art he allows to be destroyed? Recently the world was stunned when the Taliban of Afghanistan destroyed a large Buddha carving. What are we to say to Professor João Zilhão, the Director of the Portuguese Institute of Archaeology, and to Dr António Martinho Baptista, the Director of the National Centre of Rock Art when they facilitate the total destruction of their country's largest corpus of rock art, and one of Europe's greatest rock art monuments?

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International Federation of Rock Art Organisations (IFRAO), P.O. Box 216, Caulfield South, Vic. 3162, Australia